OFFICE 507

D-15682

PROJECT SUPPLY

(ELECTRONIC PARTS FLIGHT STORES)

OPERATING PROCEDURES

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Project Supply Procedures

CHANGE INCORPORATION LOG

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Contents

I. INTRODUCTION

A. JPL Project Supply is the bonded stores containing flight and non-flight electronic components, wire and connectors for use in spacecraft. Parts are received and stored, with worthiness and traceability of each component maintained.

B. 507 personnel and their functions involved in the operation of the Flight Stores:

1. Flight Stores Storekeeper(s) is/are located in the inventory facility. The storekeeper has the responsibility to directly operate the stores function as described in this document.

2. Parts Rep (representative) : This function can be performed by the Parts Rep, a Parts Interface Engineer, or a Contract Technical Manager. The role of the Parts Rep is to work the electronic parts lists for the project assigned, initiate the process to procure the required parts and kit them out when the approval cycle is completed. Maintains the EPINS data base.

3. The Parts Interface Engineer (PIE) works directly with the project personnel to aid in parts selection and provides the Parts Rep with the Electronic Parts List as it evolves through the design process.

4. The Contract Technical Manager works Source Control Drawing (SCD), including up grading and screening procurements; coordinates the efforts of Procurement, Engineering Parts Specialists, PIEs and Project personnel and the vendor to get the required parts in house, in budget, on time and within specifications.

5. The Parts Specialist is a resource for correct part applications for a given set of requirements. The specialist also generates source control documents when needed and performs data review which is required for SCD parts in stores.

II. GENERAL INSTRUCTIONS

- In the parts area behind the counter, no food or drink is allowed.
- An anti-static smock and toe strap must be worn when in the storeroom.
- The area humidity must be checked every morning; if it's below 30%, the area must be humidified.
- Individual components must only be handled in designated static controlled kitting areas.
- Always wear the wrist strap when handling parts to prevent ESD.
- Keep a running tally of antistatic boxes (stock # 190023-8) used by each subsystem; these boxes are charged to the subsystems.
- To resolve problems or discrepancies, contact the appropriate PIE, Parts Rep (kitting problem), Project Parts Support Group (PPSG) data entry (data correction), or PPSG supervisor (priorities).

- Parts shall be issued from stores by a computer generated document known as a SEKLR (Shipper Exhibit Kit List Request). The final SEKLR consists of 3 *copies, Customer copy, Stores file copy, QA copy*. The SEKLR number is used to track who obtained the parts, what the account code was as well as quantities, date codes etc..

- A Project Stores SEKLR file shall be maintained with printed copies of all SEKLRs issued, filed in SEKLR number order for one year. The SEKLR is also in electronic form in the EPINS (Electronic Parts Information Network System) data base and is maintained permanently.

A. Stores Data Entry:

The following bullets describe the data entering procedures. See the EPINS manual for additional details.

- The Project Stores lot record file is separate from but linked to the PR line item database. The lot record is created from the EPINS PR line item part information, but becomes a separate record in a separate database, and contains the Stores location, flight or non-flight quantities and costs, and part marking information.

- Each procurement is identified by trace number and date code. Additional divisions, called extensions, are used where there are different manufacturer's lot numbers, or different part grades, such as various life test parts, within a trace/date code combination. A record is kept of all transactions, that is, all incoming and outgoing quantities, and any other adjustments to the lot.

- After entering the EPINS data base, Select "Enter/Maintain Stores" and press **Enter**. "Add/Change a Part" is used to create or modify Stores lot records; "Enter a Transaction" contains the entry fields for transaction type and lot quantities.

Creating New Lot Records:

- Select "Add/Change a Part" and press **Enter**. Type in the trace number, date code, extension letter, store number, and subsystem of the lot to be created. The prompt "Record not found. Do you wish to add it?" will appear. Answer Yes to create the record. The part information will be copied from the PR record.

- If necessary, modify the part information to correspond with the parts received.

- Enter the rest of the information as described in the chart below. Press **Home** if finished before the last field. Press **Enter** from Add/Change to save the record.

  ✧ Fields marked with this symbol are copied automatically from the PR file.
  ◆ Fields marked with this symbol have a look-up window of available choices for items created from scratch. Press **End** to access the window.
  ✦ Fields marked with this symbol are related to the lot's part grade, and are updated from "Enter/Maintain Part Grade Designator" as described on the next page.

Stores Lot Record Field Name	Contents
Trace	Trace number

Date Code	4-digit date code indicating year and week parts manufactured
Ext	1-letter extension code
Store	Store number
Subsys	Store subsystem (part owner)
✦Dsg	Part grade designator code letter
✦Lev	Part grade level: (tied to code letter)
✦Grd	Part grade description (tied to code letter)
✧⬥Des	Valid EPINS descriptor code letter
✧⬥Generic	Valid EPINS generic part number
✧⬥Pkg	Valid EPINS package type code
✧Description	Value/Rating/Tolerance, or other description
✧Procurement #	Part procurement number
✧⬥Mfr.	3-letter manufacturer code
Bin 1 Bin 2 Bin 3 Bin 4	Enter up to four Stores bin locations.
Non-fl (qty)	(Quantity added with transaction records; see below.)
Flight (qty)	(Quantity added with transaction records; see below.)
✧NF Cost	Adjusted unit cost of non-flight parts.
✧FL Cost	Adjusted unit cost of flight parts.
✧ComCode	Commodity code
QA Qty	Quantity of parts sent to QA for inspection
✧PO #	PO number
Release	Order Release number or PO mod number
Lot	Manufacturer's lot number
ID #	Part marking
Com	25-character user comment

To enter flight or non-flight quantities, a transaction must be executed.

Adding Quantities To a New Record:

- After the lot record is created, select "Enter a Transaction" and press **Enter**. The transaction data entry screen will appear. Add the transaction information as described below. Categories should not be mixed, that is, each lot should have only all flight or only all non-flight parts.

Transaction Record Field	Contents
It#	Assigned by system
Type	Enter a transaction type code from the list displayed
NF Qty	Enter quantity of non-flight parts affected by this transaction
FL Qty	Enter quantity of flight parts affected by this transaction
Account #	Enter JPL account code if required
SRM	Enter JPL SRM code if required/available
Comments	25-character user comment
TranDate	System date entered automatically

Press **Home** to save the line item and **Esc** to exit the transaction data entry screen.

Entering a lot record for an item with no PR record:

- No PR records exist for wire and cable lots, so the trace number must be assigned from a special series, and the part information added from scratch. Type in the trace number, date code, stores

number, and subsystem. Using the descriptor code "9", type in the part information and continue adding the lot as usual. Skip fields will not applicable to wire and cable lots. Save the lot record and add a transaction quantity as usual.

Only wire and cable lots should be added without a corresponding PR line item record.

Modifying an existing lot record and entering additional transactions:

- Select "Add/Change a Part" and press **Enter**.
  Type the trace number of the lot and press **End**. A window will appear with the cursor pointing to the first of the available lot records for that trace.
  Scroll through the lots with the arrow keys, and select the correct lot record by pressing **Enter**.

- To modify the lot record, press **Enter** until you pass the Subsystem field. Type in the revised information and press **Home.** The key information fields (trace, date code, extension, store, and subsystem) may not be modified; a new record must be created if they change.

- All changes in quantity affecting the lot must be entered as transactions. To modify or enter a transaction, press **Home** from the beginning of the lot record and select "Enter a Transaction". The transaction data entry screen appears. Enter new information as described above, save the line by pressing **Home**, and leave by pressing **Esc**.

Exiting "Enter/Maintain Stores":

- To exit, press **Esc** until returned to the PTS Main Menu.

III. USE OF LOT/DATE CODE EXTENSIONS

- Electronic part lots received into Project Stores will be entered by a JPL Trace Number. The record will include P.O. number, lot number and or date code, a one-character (or blank) extension and store number. The majority of line items will have only one extension per date code.

  If there is more than one manufacturer's lot number per date code, each manufacturer's lot number will receive a separate extension.

  For more complex procurements, particularly parts built to JPL specifications, in addition to the flight parts ordered, there will typically be sample parts from the various qualification processes, e.g., Group B.3, Group B.5, etc. These parts are marked and packaged separately from the flight parts and from each other. Different lot extensions are used to distinguish these differences in processing. If the parts of the same date code are found by QA to be of more than one part grade, each part grade will receive a separate extension.

  If parts are returned to stores after having upgrade screening or additional testing, a new lot record with a new extension should be created, and the test noted in the lot record comments field.

IV. RECEIVING PARTS INTO STORES

Receiving Wire & Cable:

- Parts must have a part acceptance tag (PAT Tag). This is issued from QA.
  Inventory is adjusted as items are kitted.

Receiving Electronic Parts:

- Bring boxes of parts into the Stores area using the cart in the Receiving area.

- Open the boxes and look for any paperwork. If there is no packing slip and/or C of C, reject the package to the *Supervisor,* Shipping Receiving Department for possible RTV (Return to Vendor) and notify the appropriate Parts Rep/PIE of the discrepancy.

- If the trace number does not appear on the paperwork, search by P.O. (Purchase Order) number in either SAS or EPINS to find the trace number.

- Determine if the parts are flight or non-flight. The "Deliver To" field of the EPINS PR line item record will show the stores destination, including F for flight or N for non-flight. If the flight/non-flight determination is unclear, consult the appropriate Parts Engineer, Rep or the buyer in procurement.

Non-flight Parts:

- Fill out a Part Identification Tag (JPL 0494, green (non-flight), Figure 1). Indicate box number out of total boxes, lot number if any, quantity, manufacturer per 3-letter JPL code, part name (descriptor), part type (generic and value), rating, trace number, subsystem or Project, and date code if any.

- Verify part and manufacturer information against EPINS PR information, looking it up by trace number or P.O. number (Figure 2). If EPINS data are erroneous or incomplete, contact PPSG data entry for correction. If the parts delivered are discrepant, e.g., RNC55J instead of RNC55H, notify the appropriate Parts Engineer and hold for resolution. Note the Project or Subsystem that originated the procurement. If any of the required information is not available from the EPINS PR line item record, contact the appropriate Parts Rep.

- Count the parts and repack them in the original packaging if possible, or in antistatic bags sealed with conductive tape. Attach the Parts Identification Tag to the parts package.

- Find a bin with enough space to hold the parts in the area assigned to the Subsystem, note the bin location on the Part Identification Tag, and put the parts in the bin.

- Fill out a line on the Project Supply Input Form (JPL 2577, Figure 3) for each trace number. If date codes are available, fill out a line for each date code within each trace number.
  Include full part marking information (what is written on the part itself).

- Using the Input Form as filled out above, create Stores lot records in EPINS (Figure 4, Figure 5). See the EPINS manual for data entry procedures to create lot records and transaction records for each lot. See Section III. above for use of lot/date code extensions. Enter the quantity of parts for each record in the non-flight quantity field.

- Send the packing slip or Certificate of Conformance to the appropriate Parts Rep/PIE.

Flight Parts:

- Fill out a Part Identification Tag (JPL 0494, white (flight), Figure 1). Indicate box number out of total boxes, lot number if any, quantity, manufacturer per 3-letter JPL code, part name (descriptor), part type (generic and value), rating, trace number, subsystem or Project, and date code if any.

- Verify the part and manufacturer information with EPINS PR information, looking it up by trace number or P.O. number (Figure 2). If EPINS data are erroneous or incomplete, contact PPSG data entry for correction. If the wrong parts were delivered, notify the appropriate Parts Rep and hold for resolution. Note the Project or Subsystem that originated the procurement. If any of the required information is not available from the EPINS PR line item record, contact the appropriate Parts Rep/PIE.

- Count the parts and repack in the original packaging if possible, or in antistatic bags sealed with conductive tape. For complex flight procurements, especially parts bought to JPL specifications, separate the bags of flight and flight-worthy parts from any test parts or qual parts, according to the manufacturer's indications. Determine the part grade, according to the Part Grade Control Listing (Figure 15), with the assistance of the CTM, Parts Rep, or PPSG Supervisor, if necessary. Store non-flight part grades as non-flight parts (see above). Attach the Parts Identification Tag(s) to the parts package(s).

- If any non-flight lot records are created for flight trace numbers, Project Stores may advise the CTM or appropriate Parts Rep for possible adjustment to the unit cost.

- Some Flight parts for critical missions require receiving inspection by QA. *Send only flight part grade and parts packaged as "DPA samples" to QA for inspection.* Send them over in their original packaging, with the Parts Identification Tag(s) attached.

- Standard passives are defined as MIL-standard resistors and capacitors with no DPA or other post-receipt testing requirement and meeting the required mission payload classification of JPL-D-5357. Individual Projects may, by Interoffice Memo (example, Figure 16), waive the QA receiving inspection for standard passive devices. If the inspection is waived, standard passives will not require QA activity at this time. If the parts are either active devices, nonstandard passive devices, or standard passives requiring DPA or other post-receipt testing, the parts will go to QA for receiving inspection.

- Missions using “commercial off the shelf “ parts (COTS)do not typically require QA activity for flight use, but may be received directly into and kitted directly from Stores. Some missions using commercial parts may require inspection of certain components. If inspection is required, the Parts Rep will submit kits containing only those items, mark the "QA Inspection" field on the SEKLR with T, and Project Stores shall send the parts to QA as above.

- *For parts with no QA incoming inspection requirements, i.e., standard passives, and typical Class D flight parts, once the part information has been verified, Stores shall send the packing slip or Certificate of Conformance to the appropriate PIE/Parts Rep, put a brown seal (Figure 6) on the parts package and stamp it with the date and Stores personnel number (JAS IOM 514-D-079-94, Figure 15).* For bulk shipments, the container should be closed with the seal; for individually packaged parts, each package should be sealed and stamped. Find a bin with enough space to hold the parts in the area assigned to the subsystem, note the bin location on the Part ID Tag, and put the parts in the bin.

- Fill out a line on the Project Supply Input Form (JPL Doc. 2577, Figure 3) for each lot/date code number. Include flight and non-flight quantities, full part marking information (what is written on the part itself).

- Using the Input Form as filled out above, create stores lot records in EPINS (Figure 7). See the EPINS manual for data entry procedures to create lot records and transaction records for each lot.

- Create separate stores lot records for each date code. Create separate stores lot records for each manufacturer's lot number. Use different 1-letter extensions to indicate different manufacturer's lot numbers with the same date code.

- For manufacturer-screened parts, create a separate stores lot record with the same date code and a different 1-letter extension, for each group of parts with a different processing history (Group B, QCI, DPA units, flight parts, etc.). See Section III. above for use of lot/date code extensions. Enter the reason for the part difference in processing, e.g., "Group B4, Destruct", in the comments field. If there is any question of the parts categorization, consult the CTM assigned to the procurement, the appropriate Parts Rep or the Project Parts Support Group Supervisor in that order. Locate the name of the CTM in the "Requester" field of the PR header.

- If the parts are to go to QA, note "IN QA" in the bin location field, otherwise enter their bin number. Put the quantity of parts that went into Stores or over to QA in the transaction record, and also note the quantity to QA in the comments field of the lot record.

- Destruct parts received from the manufacturer may be scrapped with the approval of the Parts Rep, in order to save space and paperwork.

- All data received with parts are to be sent to the appropriate Parts Rep, *with the exception of any X-ray films, which are sent to QA with the parts.*

Flight Parts Returned from QA:

- After QA completes the receiving inspection, the parts are returned to Project Stores until a kit is submitted, at which time kitting inspection by QA will be performed.

- When the parts are returned from receiving inspection, fill out form from QA for each item. QA will issue new Part Identification Tags for any parts dispositioned as "Non-flight" (green tag) or as catastrophic rejects (Scrap, pink tag) following the inspection. Flight parts will be sealed by QA with a blue seal; non-flight and scrap will be sealed with a red seal.

- Find a bin location with enough space to hold the parts in the area assigned to the subsystem, note the bin location on the Part Identification Tag, and put the parts in the bin.

- These parts will already have lot records. Bring up the record on the computer, enter the bin location and flight and non-flight quantities received back from QA. Enter the transaction per the EPINS manual instructions.

- *If the component specialist rejects some or all of the parts, they fail DPA, an alert is issued against them, or other circumstances arise which make some or all of the parts rejectable, parts will be returned to parent lot then transferred to another extension and marked non flight.*

- If a lot is rejected by JPL QA or Parts Specialist, the CTM or Parts Interface Engineer will work with JPL Procurement to obtain a Return to Vendor (RTV) authorization from the supplier and the parts will be returned for replacement or credit. The PR and Stores records will be retained showing zero quantity and RTV entered in the comment field. Rejected lots that cannot be returned to the supplier should be marked non-flight with commentary to explain the rejection. These parts can be used for lead forming practice, breadboard parts, etc..

Flight Parts Returned from Upgrade Screening or Special Testing:

- Parts returned from upgrade screening are 100% inspected by QA. When they are returned to stores, follow the above procedures, indicating in the comments field of the lot record that the parts have been upgraded. If only part of a lot has been upgraded, the upgrade parts should receive a new extension, as their part grade is now different from the original part grade. Also, any part that fails in the up screening process should be returned to stores before being sent to FA so the lot records show where the parts went. If no FA is required, the parts are to be removed from the flight parts inventory and placed in non-flight category with a note in the comment field.

- *Parts subjected to special (non-destructive) tests must have been handled and packaged so as to retain flight worthiness.* Typically, an AIDs (Assembly or Test Inspection & Data Sheet) JLP form #2916 is filled out, which requests QA to monitor/approve the procedures and area where the work is to be done.

V. ISSUING PARTS FROM STORES

- There are several types of kits. In addition to flight and non-flight kits to fill Parts Lists (kit type KL) requirements for use in spacecraft, parts may be withdrawn from Project Stores for destructive tests, including Destructive Physical Analysis (kit type KD), for non-destructive tests, including radiation (kit type KT), for upgrade or other screening (kit type K S), or to fill a requirement that exists outside of Section 507's electronic system, including wire and cable (kit type KO).

- Begin by bringing up all the new kits for the day on the computer by running a list of kits with status of "Approved"; print the worksheet for each kit (Figure 10).

Kitting Wire & Cable:

- Locate and pull the parts requested according to the worksheet and put them in a paper bag.

- Print the final SEKLR (Shipper Exhibit Kit List Request) form (Figure 11); telephone the customer ("Requester").

- Put the bag and the SEKLR in the parts cabinet.

- Have the Requester or designee sign the top 2 copies of the SEKLR form. The Requester takes the top copy; the second is filed in the Project Stores SEKLR file.

- Change the EPINS kit status of the SEKLR from "Approved" to "Kitted" and enter who picked up the kitted items and when.

- Some users may arrange with Project Stores to send Kit information by fax; enter the kit into EPINS according to EPINS data entry procedures and proceed as above.

Kitting Non-flight Electronic Parts:

- Locate and pull bags or trays of requested parts from their bins according to the worksheet.

- Assemble a non-static box. (Boxes (stock #190023-8) are charged to customers.) If a large quantity of parts is being kitted, or parts are large, use a white box. (Larger antistatic boxes may be available in the future.)

- If a kit has been given expedite status with the approval of the PPSG Supervisor, the storekeeper will be notified. These kits should receive priority attention.

- Line the box with antistatic pink bubble-pack (stock 190133-1) or pink foam wrap.

- At the kitting station, open the bags or trays, remove the quantity to be kitted, and place the kitted parts in antistatic bags (*stock #3M 2100)* of the appropriate size. Write the trace number on a sticker and attach it to the bag. Tape the bags shut with conductive tape, attach appropriate seal on bag and put the bags into the box.

- Fill out a Component Control Tag (JPL 2679, Figure 9) as you kit. Write "Box 1 of 1", etc. on top. Include quantity being kitted, generic ("component name"), manufacturer, and trace number. .Skip lines between trace numbers.

- Adjust the parts quantity on the Parts Inventory Tag to show how many remain. Make sure the bin location is noted on the tag.

- Return the unused parts to the correct bins.

- Print the finished SEKLR (Figure 11). Put the box and the SEKLR in the cabinet.

- Telephone the customer ("Requester"). The requester or designee signs the top 2 copies of SEKLR and takes the parts *(and the first copy of the SEKLR) (customer copy*. The stores copy is to be filed by SEKLR number in the Project Stores SEKLR file.

- In EPINS, enter the transaction in the stores lot record and change the kit status to "Kitted". Enter who picked up the parts and when. (Figure 12)

Kitting Flight Electronic Parts:

- Locate and pull bags or trays of requested parts from their bins according to the worksheet.

- Assemble a non-static box. (Boxes (stock #190023-8) are charged to customers.) If a large quantity of parts is being kitted, or parts are large, use a white box. (Larger antistatic boxes may be available in the future.)

- Line the box with antistatic pink bubble-pack (stock 190133-1) or pink foam wrap.

- If a kit has been given expedite status with the approval of the PPSG Supervisor, an "EXPEDITE" label (JPL 0824, Figure 12) should be added to the box. These kits should receive priority attention.

- Verify that all items on any particular approved kit are standard passive devices (QA Inspection field will be F) or nonstandard passive/active devices (QA Inspection field will be T).

- At the kitting station, open the bags or trays, remove the quantity to be kitted, and place the kitted parts in antistatic bags *(stock # 3M 2100)* of the appropriate size. Write the trace number on a sticker and attach it to the bag. Tape the bags shut with conductive tape, put appropriate seal on bag and put the bags into the box.

- Adjust the parts quantity on the Parts Inventory Tag to show how many remain. Make sure the bin location is noted on the tag.

- Fill out a Component Control Tag (JPL 2679, Figure 9) as you kit. Write "Box 1 of 1", etc. on top. Include lot number, quantity being kitted, generic ("component name"), manufacturer, and trace number. Skip lines between lots.

- When all the items on a SEKLR have been kitted, tape the control tag(s) to the box(s).

- Return the unused parts to the correct bins.

- Print the finished SEKLR (Figure 11).

- *By mutual agreement between Sections 512 and 507, 100% kitting inspection has been waived on standard passive devices as defined above (IOM FSQA 445-92, John E. Miller). These devices, that is, parts that have undergone receiving inspection but do not require kitting inspection, will have their kit containers sealed by Project Stores with a blue seal (Figure 14) and stamped with the date and Stores personnel number.*

- For parts not requiring kitting inspection, put the box and the SEKLR in the cabinet.

- For parts requiring kitting inspection, send the SEKLR and parts over to QA. Kitting inspection will verify the closure and acceptable status of the PP. and PRICE. When closure is completed, the parts will be sent back to Stores with a blue seal.

- Telephone the customer ("Requester"). The requester or designee signs the top 2 copies of SEKLR and takes the parts *and the first copy of the SEKLR (customer copy).* The stores copy is to be filed by SEKLR number in the Project Stores SEKLR file.

- In EPINS, enter the transaction in the stores lot record and change the kit status to "Kitted". Enter who picked up the parts and when. (Figure 12)

- In EPINS, enter the kit type:

  Kit to List (KL)

  Test Kits (KT)

  Screening Kits (ITRs) (KS)

  DPA Kits (KD)

  Kits to Other (KO)

  Return Kits (KR)

Transfer Kits:

- From time to time, for budgetary or other reasons, ownership of parts may be transferred from one Project or Subsystem to another, where no requirement for immediate kitting exists. A transfer kit of type KX is used to document this process.

- A new stores lot record will be created in EPINS for the new owner's store number, containing the quantity to be transferred.

- The original EPINS stores lot record will be decremented by the same quantity and the transaction recorded in the transaction records.

- The original parts package will be opened, under kitting conditions as described above. The quantity of parts to be transferred will be removed and re-packaged, and a new Parts Identification Tag issued. The quantity on the original Parts Identification Tag should be adjusted. If the total quantity of parts remaining in one package are to be transferred, the Subsystem and bin location on the original Parts Identification Tag may be revised instead.

- The original parts package(s) will be returned to their bin(s). The new parts package(s) will be assigned bin locations in the area assigned to their new owner, the bin location noted on the Parts Identification Tag, and placed in the bin(s).

- Project Stores may notify the appropriate Parts Rep and the PPSG Supervisor by e-mail or telephone when this activity has been completed.

Parts Reps should make every effort to minimize the number of such inter-store transfers by kitting transfer parts directly to users whenever possible.

VI. ASSIGNING STORES TO NEW PROJECTS

- When a new project requires parts storage space in Project Supply, the head Storekeeper shall assign a 2 digit number that has not been previously used by another project. If a user wishes to combine more than one project within one store number, the user must notify the head storekeeper.

VII. INVENTORY & REPORTS

- Parts are constantly being received, issued (kitted) and surplused from Project Supply Stores; thus the value of the inventory changes constantly. The inventory and the associated value is maintained in the EPINS database and is constantly updated as each transaction occurs. Periodic reports of the inventory and its value are required to be provided to appropriate JPL agencies and to NASA.

- There shall be an annual physical inventory report (NASA 1018 outlined below). Inventory adjustments needed due to count discrepancies are made by using the EPINS Adjustment Transaction. Maintaining the inventory count is an ongoing process as an every day effort. The receipt and issuance of parts is done using the EPINs computer as outlined in this document. The inventory count goes up and down with the activity in the EPINs real time data base .

- Each month report TSCNUR18, NASA Commodity Code 1203 Totals Report, Project Supply, shall be prepared and a copy sent to Acquisitions Systems Office. This report shows the closing balance of the value of the electronic parts inventory in stores by "Store Number" which correspond to specific JPL Projects.

- Each month report TSCNUR41, NASA Commodity Code 1204 Totals Report, Project Supply, shall be prepared and a copy sent to Acquisitions Systems Office. This report shows the closing balance of the value of the inventory in Wire and Connector stores. Responsibility for this Code rests with P. Dillon, Section 352, while 507 prepares and submits the report.

VIII. FLIGHT STORES PART PRICING and VALUE

General

- The Electronic Parts Information Network Systems (EPINS) is the data base through which all flight part acquisition information and distribution is documented. When a project part requirement is determined, a purchase requisition is issued. This is entered into EPINS with the estimated total cost as well as the unit cost for each line item. When procurement issues a P.O. to the successful vendor, the buyer/negotiator enters the "agreed to" cost of the P.O. into EPINS which results in a new unit price of each line item. The buyer / negotiator places the same data into SASS.

Procedure

A. Unit Cost Determination

- Section 507 Electronic Parts Information Network Systems (EPINS) data base contains two unit cost fields for each project's flight stores part procurement (and extensions): a "unit cost" and an adjusted "unit cost".

- "Unit cost" is the number of parts ordered divided into the P.O. cost for each part line item on the P.O.. Special processing or other non recurring costs which are listed as separate line items on the P.O. do not get added into the "unit cost". This cost is carried both in EPINS and SASS as verified by the 507 order desk tech.

- Note: Flight Stores uses "extensions" to categorize different part status. Extension A could be for fully screened parts, extension B could be for non destructive life test parts, extension C could be for destructive life test parts, etc..

- When there is special processing or other costs which are listed as separate P.O. line items or when a lot is received from a manufacturer and sent to another vendor for further or special processing, the "unit cost" no longer reflects the true part cost to JPL. In these cases, 507 personnel sum all of the costs from the various requirements on the P.O./ order release associated with acquiring and enter an "adjusted unit cost" in EPINS.

- MIL-Spec parts and standard parts (off the shelf) being used by a flight project with a classification permitting their use as is, will go directly to the designated flight stores. The price of these parts is determined by dividing the total number of received (usually, the number ordered) parts into the total cost of the P.O..

- Source Control Drawing (SCD) procured parts are sent into the Flight Parts Quality Control (FPQA) group to insure that the parts match the documentation in terms of quantity, marking and are undamaged. The required X-rays are also examined for the presence of foreign matter. In parallel, the required electrical data is sent to the appropriate parts specialist for review and analysis. When FPQA is done, they may have rejected a part or two due to damaged leads, mis-marking or X-ray review.

  The parts specialist may reject parts due to variations in data that look different than the rest of the lot (outliers). FPQA then sends the lot of parts into flight stores with the rejects marked non-flight and the accepted units marked flight. The unit cost in EPINS is then adjusted by taking the total flight parts yielded and dividing that number into the total cost of the P.O..

  Increasingly, due to supply shortages, time constraints and obsolescence, flight projects have t divided by the number of parts. Typically, due to minimum order requirements and testing requirements, there will be more parts procured than needed. An estimate is made of how many will be needed to up-screen in order to yield the required flight parts. A PR is then issued to procurement and a P.O. is

issued to the successful screening house vendor. The unit price of the parts successfully up-screened, is the cost of the screening P.O. divided by the yielded parts plus the original unit cost of the screened parts including the units that failed the screen. The parts left that were not up-screened are classified as non-f light and have the unit cost based on the original unit cost.

B. Funds Obligation

Section 507 obligates the ordering project's funds to acquire parts for that project; the project "owns" this procurement. In general, no funds are transferred when the parts are kitted (delivered) to the project; they "own" them. If the project chooses to allow use of some of these parts by another project, funds will be transferred by the monthly up load to the FIS.

- All active projects procuring their parts by Section 507 are “charging” stores. The account of the user at the time of kitting (delivery) is recorded so as to track the cost of parts for each subsystem and to automatically transfer costs to the correct account. To implement this, Section 507 has instituted a "charging store". Each kit of parts has a receiving account code. Monthly, the value of all the parts kitted to that account from the "charging store" is up loaded into the Financial computers. The owner of the store is not charged at the time of kitting since they own the parts. The RCP detail back up sheets will reflect this accounting activity.

C. Costing:

- When a user kits out parts that were procured on the users account code there is no “charging” required since the user has already "paid" for the parts. The kit simply reduces the inventory.

  When a user obtains approval to kit out parts procured under a different account code , the cost will be (as outlined above) up loaded to the FIS and debited from the user's account to the buyer's account at the adjusted unit price times the number kitted..

- Parts from projects that have been closed out are also available to qualified users.

D. **Value of parts:**

- For all projects at JPL that have not released their parts, the value of the inventory equals the adjusted unit part price times the quantity left in stores (not delivered to a user). Where there were no cost adjustments involved with a part procurement, the unit price is used.

- For all parts in inventory from projects that have released their parts, the "value" is the unit (or adjusted unit) price times the quantity in stores.

E. NASA’s 1018 Flight Stores Reporting:

- On receipt of the annual Financial Analysis and Reporting Group's (FARG) request for Flight Stores inventory report, the EPINS 1018 report will be generated with a hard copy sent to FARG and a magnetic tape record stored for auditing purposes. The report shows by store number, the value of the inventory. Active project account numbers (and project name) will be shown for the appropriate store. The normal report data will be taken at fiscal year end, however, the system is able to respond to the NASA requested date, if different from JPL’s fiscal year end.

IX. LIST OF ILLUSTRATIONS